

Wisconsin Entomological Society Newsletter

Volume 27, Number 2

June 2000

2000 NATURAL HISTORY WORKSHOPS *at the UWM Field Station*

The University of Wisconsin-Milwaukee Field Station conducts a series of Natural History Workshops. These workshops offer an opportunity to study focused topics at college-level instruction under the guidance of noted authorities. Most workshops present two full days of instruction. Housing and meals are available at the Station. Enrollment is limited to 20; the atmosphere is informal and instruction is individualized. Workshops may be taken for undergrad or graduate college credit by enrolling in UWM. Topics in Field Biology. Fees vary. Please contact the Station for a registration form. Check out our website (www.uwm.edu/Dept/fieldstation/) for a full description of the workshops.

University of Wisconsin-Milwaukee Field Station
3095 Blue Goose Rd., Saukville, WI 53080
Contact person: Dr. Jim Reinartz
E-mail: fieldstn@uwm.edu
Phone: (262) 675-6844 Fax: (262) 675-0337

The 2000 Workshop Schedule includes the following courses:

1. **Methods for Description of Vegetation**
Instructor: Dr. Jim Reinartz June 12-17
2. **Aquatic Invertebrates: Identification & Ecology**
Instructor: Dr. Jerry Kaster July 14 & 15
3. **Biology of Insects**
Instructor: Dr. Gretchen Meyer July 28 & 29
4. **Grasses: Identification & Ecology**
Instructor: Dr. Robert Freckmann August 4 and 5
5. **Spiders: Identification & Ecology**
Instructor: Dr. Michael Draney August 11 & 12
6. **Composites: Taxonomy & Evolution**
Instructor: Dr. Robert Kowal August 25 & 26
7. **Small Mammal Population Estimation Techniques**
Instructor: Dr. Eric Anderson Sept. 15 & 16

NABA 4th of July Butterfly Count 2000

The 26th Annual NABA 4th of July Butterfly Count will be held this summer. These counts are fun-filled but also track the butterfly populations of North America. Volunteers select a count area with a 15-mile diameter and conduct a one-day census of all butterflies sighted within that circle. These counts are usually held in the few weeks before or after the 4th of July.

The North American Butterfly Association (NABA) organizes the counts and publishes their annual reports. These reports provide important information about the geographical distributions and population sizes of the species counted. Comparisons of the results over the years monitor changes in butterfly populations and reveal effects of weather and habitat change on the different species. In some years the butterfly count shows dramatic changes in butterfly populations, while other years indicate little fluctuation in butterfly numbers. Either way, the butterfly counters are always curious about what next year's results will be.

No matter how much or how little butterfly watching you've done, the results of butterfly counting can be surprising and interesting. If a count already exists in your area, please join them for a day of fascinating butterfly counting. If there is no count in your area, you may start your own if you know how to identify the butterflies. Otherwise, inspire a nature center or butterfly club to start one for you.

For more information on the count program, counts in your area, how to conduct a count, and NABA, please consult NABA's website at www.naba.org or send a self-addressed, stamped business envelope to:

NABA-Butterfly Count
4 Delaware Road
Morristown, NJ 07960

The Wisconsin Entomological Society Newsletter is published three times a year, at irregular intervals. It is provided to encourage and facilitate the exchange of information by the membership, and to keep the members informed of the activities of the organization. Members are strongly encouraged to contribute items for inclusion in the newsletter. Please send all news items, notes, new or interesting insect records, season summaries, and research requests to the editor:

Janice Stiefel, 2125 Grove Road, Bailey's Harbor, WI 54202, e-mail: jstiefel@itol.com

NOTE: Please report any address changes to Les Ferge, 7119 Hubbard Ave., Middleton, WI 53562. e-mail: ferge@chorus.net

Summer 2000 Insect Field Trips by the Nature Conservancy and the Madison Audubon Society

(Note: These are not collecting trips)

10th ANNUAL MADISON BUTTERFLY COUNT Saturday, July 1 9:00 A.M. to Noon

Each year within a few weeks of the Fourth of July, butterfly enthusiasts all over North America participate in a census of butterfly species. Each count is conducted at several sites within a 15 mile diameter circle and the same circle is surveyed each year. These censuses help to monitor the health of our butterfly populations and the results of all North American counts are published in an annual report. Last year a total of 387 counts were conducted across North America, 13 of them in Wisconsin. On the Madison census we counted 460 butterflies of 40 species. The group will have an enjoyable time finding, observing and counting butterflies. Counters are needed. The leader will provide identification expertise. If you can identify butterflies, or can help spot butterflies, or just want to see and learn about butterflies, join us on this count. Observe with eye or close-focusing binoculars. Dress for protection from the heat and sun; a hat is recommended. Bring a lunch as the count may go until noon. (Anyone who wants to continue counting in the afternoon at another site can do so.) The organizer (North American Butterfly Association) requires a \$2.50 fee from each count participant (similar to the Christmas Bird Count) to cover administrative and publishing costs.

DIRECTIONS: Meet in the parking lot for the McKay Center in the UW Arboretum in Madison at 9 A.M. We will count until noon.

In Madison, from the south



Beltline Highway heading west, take the Seminole Highway exit and turn right (north) on Seminole Highway. After a few blocks turn right into the UW Arboretum and follow the drive to a dead end at the parking lot for the McKay Center. Meet here.

If you have any questions about the Madison Butterfly Count, please call the count compiler, Karl Legler, (608) 643-4926 (Sauk City).

DRAGONFLIES OF THE CEDARBURG BOG Saturday, July 8 10:00 A.M. to 2:00 P.M.

Dragonflies, those magnificent "living flashes of light", occupy a prominent place in the web of life in our aquatic ecosystems. This 4-hour joint field trip of the Madison Audubon Society and The Nature Conservancy will showcase the beauty, biology, and behavior of some of Wisconsin's 111 species of dragonflies. Cedarburg Bog is the largest relict glacial bog in S.E. Wisconsin. It has a variety of habitats, some more typical of the northern part of the state, with good dragonfly diversity. (We have the possibility of encountering the Federally Endangered Hine's Emerald.) Dragonfly expert Bill Smith, zoologist with the Bureau of Endangered Resources, will discuss the ecology and fascinating life history of these amazing aerialists.

Bring a lunch. Wear long sleeves, long pants, and a hat to protect against the sun. Be prepared to wade in shallow water, if you choose. Take along waterproof footwear in case we encounter wet conditions. Bring binoculars if you have them. (The closer they can focus the better.) If



you have a dip net to examine larva bring it. Skilled users of aerial nets may bring them for catch-and-release. Call Bill Smith at (608) 266-0924 (work) only if you have a question about the trip.

DIRECTIONS: Meet at the University of Wisconsin Field Station at 10 A.M. A map is on the Internet at www.uwm.edu/Dept/fieldstation

From West Bend in Washington Co., go east on State Highway 33, through the village of Newburg, continuing on 33 to the southeast for about 1 mile. Then turn right (south) on Blue Goose Road. Drive south on Blue Goose for nearly 2 miles to the entrance to the Field Station on the right (west) side of the road.

BUTTERFLIES OF CHEROKEE MARSH Sunday, July 9 10:00 A.M. to Noon

On this morning trip of the Madison Audubon Society, we'll observe and learn about butterflies, those small but exquisitely beautiful creatures that dance about our ankles in summer. Ann Swengel will lead this two-hour hike at Cherokee Marsh. We will observe a variety of butterflies as they take nectar from wildflowers, and learn about their identification, behavior, and lifestyle. Ann is a widely-known butterfly researcher, photographer and author of numerous articles on butterflies. She is a vice president of the North American Butterfly Association.

Bring binoculars if you have them (close-focusing ones work best) or just get close! It's best to wear long pants and a hat for protection from the sun.

DIRECTIONS: Meet at the Cherokee Marsh parking lot at the north end of Sherman Ave. at 10 A.M. The trip will last until noon.

On the north side of Madison take Northport Drive (Highway 113) then turn north on Sherman Ave. Call Ann at (608) 356-9543, only if you have a question about the trip. ☺

Long time members of the Wisconsin Entomological Society, Su Borkin and her father, Ray Sullivan have traveled all over the world in search of endangered butterflies and moths, as well as other insect specimens. Su is Director of Public Programs and overseer of the Puelicher Butterfly Wing at the Milwaukee Public Museum. This new permanent butterfly exhibit opens May 15.

Ray is a retired mechanical engineer, an enthusiastic stamp collector, and a museum volunteer. He has helped Su acquire a substantial number of butterfly stamps for the new exhibit and has also donated some of his duplicate stamps. Ray stated, "I'm a mechanical engineer by trade who never had a course in biology in my life. All I knew was nuts, bolts and gears. After I retired in 1984, I found that I had time on my hands and decided to do some volunteer work at the museum. Working with butterflies and mounting specimens, I became quite interested in them. It was an entirely different life from what I was doing. I would go out into the field with Su, helping her look for endangered species."

"And dad got hooked on netting butterflies," said Su. "Dad's been a tennis player all his life. His hand/net accuracy is just wonderful."

This pair of butterfly enthusiasts initially began searching for butterflies behind their family home along the Underwood Creek Parkway in Wauwatosa. At that time their mission was to find the Great Copper Butterfly, as well as the endangered Swamp Metalmark Butterfly and the Poweshiek Skipper (which has a wingspan the size of a nickel).

The Monarch Butterfly is of great interest to Su and her dad. They have ventured to Monarch habitats like Newport State Park in Door County and to the mountainous region northwest of Mexico City, which is the winter home of the Monarch. Su commented, 'What we

Father and Daughter Team

...With a Butterfly Connection



collected when they traveled to Brazil and to the Tirimbina Rainforest, a 750-acre mid-elevation tropical rainforest in northeastern Costa Rica.

Other unforgettable

adventures involve a missed plane connection, a nerve-wracking ride through the Brazilian countryside in a Volkswagen minus its windshield wipers (hitting every pothole in sight), Ray stepping on a nest of yellow jackets, and Su stumbling into a nest of what she thought were little kittens but turned out to be skunks. In one of their Costa Rica escapades they emerged from a wooded area covered with ticks. Needless to say, they spent the rest of the day picking ticks off each other with a tweezers. On the side, Su added, "Both of us have freckled skin, so we began taking all these little ticks off which also looked like our freckles."

Su's other interests are her understanding husband, Art, and a horse. Su remarked, "Art is very tolerant when I bring home some strange looking larva or caterpillar eggs and keep them in our refrigerator. Often, I have caterpillar cages in the house. We have a lot of nectar plants in our yard, but the field work he would just as soon do without."

Memories of their shared adventures are treasures Su and her father can never forget. What a shining example they are of the father and daughter bond society seeks but finds hard to achieve. ☺



Ray Sullivan and Su Borkin searching for butterflies

found was that the Monarchs return in the spring to the tip of the Door County peninsula, as opposed to the middle of the state where they are widely scattered and harder to access what's going on from year to year." Ray also participates in the Monarch watch program, where he helps tag the butterflies he finds in his backyard, and makes a weekly survey of the Milkweed plants to check for eggs and larva that are eating the plants. This information is tabulated giving scientists an idea of the insect's population growth from year to year. His volunteer time at the museum involves mounting the chrysalides, before placing them into the exhibit's incubator chambers.

The Sullivan family consisted of five children. In the early years, because he was busy and had five mouths to feed, Ray said he didn't spend much time teaching the children about nature. He did notice that the girls enjoyed venturing into a woodland along the bike trail near their home. Su would observe the many different species of butterflies found in the area. In the spring his other daughter, Ellen, would record the duck sounds she heard nearby.

Su explained, "I was always interested in animals from the time I was a little girl. I was reading animal stories when the other kids were playing with their Barbie dolls. It's something I had a natural interest in. I can remember wandering into the neighbor's yard and picking caterpillars off flower leaves and watching these things grow. I was fortunate to grow up in an area where there were butterflies, so I had a first-hand experience observing nature and found it to be really fascinating."

The museum's tropical rainforest exhibit, displays the various species of butterflies Ray and Su

ROMANCE, INTRIGUE, MYSTERY, AND DEATH

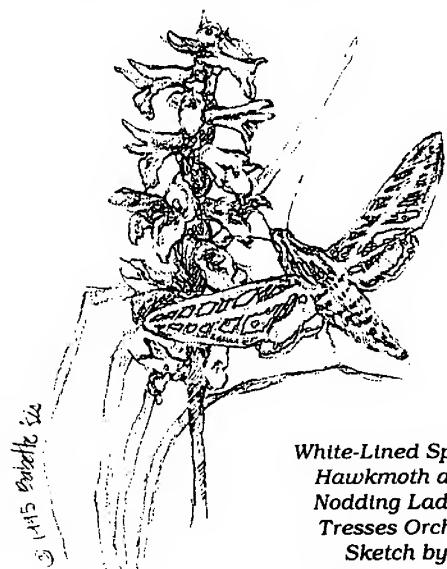
IN THE NATURAL LANDSCAPE

By Babette Kis

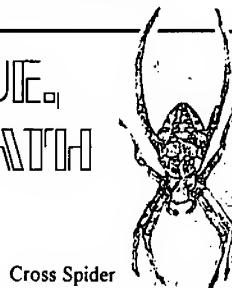
 You don't have to be a soap opera aficionado to indulge in the world of romance, intrigue, mystery, and death! Just go into your natural landscape during the warm days of spring and summer.

While sitting on the porch on a warm summer night, enjoy the fragrance of Evening Primrose and listen to male crickets chirping for potential mates. During the day, especially around noon, you may see Pearly Crescentspot Butterflies spiraling a courtship dance over your Lance-leaved Coreopsis, Black-eyed Susans, Prairie Phlox, and Junegrass.

Longing for an evening of intrigue? Take your flashlight out to your sunny garden after sunset and look for moths nectaring on Lance-leaved Coreopsis, Wild Bergamot and Wild Quinine. If you are fortunate, you may see a three-quarter-inch long moth with geometric "scratch art" markings on its wings fly into a spider web.



White-Lined Sphinx Hawkmoth and Nodding Ladies Tresses Orchid Sketch by Babette Kis 1995



Cross Spider

When it touches the web, it sometimes somersaults, so that its wings become stuck to the web. Within a second, a Black and Yellow Argiope, Cross Orb-Weaver or other orb-weaving spider hurries down. The moth holds perfectly still. Is it doomed? Another second, and the spider climbs back to its hiding place under a flower head or leaves. The moth gives a twist and disappears. This moth escape artist is known as the Master's Dart.

Like mysteries? Search host plants for Bumblebee Moth Caterpillars. Stay out late and see if Elm or White-Lined Hawkmoths pollinate Yellow Lady Slipper Orchids at night. For those who want a Sequoia-sized challenge, try to find out what kind of moth the diminutive black and gold Prairie Gentian Flower Caterpillar turns into. Please e-mail me if you do at: bkis@MPW.net

Death is an everyday part of insect life. Green Ambush Bugs, hiding at the sides of Gray-headed Coneflowers or other composites, grab spiders, small beetles or bugs that happen by. Atop Purple Coneflowers, green and red Flower Spiders reach for an Asparagus Beetle meal. Watch for the tiny, lethal, Braconid Wasp circling a native honeysuckle, looking for a hornworm caterpillar in which to lay her eggs. Discover these or other events playing in your natural landscape this summer. ☀

© 1997 Babette Kis

The Fascinating World of Insects

by Janice Stiefel

Not only are insects among the most specialized creatures on earth but they are also the most plentiful, outnumbering all other animals by about four to one. There are nearly a million known species and they live almost everywhere that life of any kind can survive—from the sun-baked deserts, to the desolate ice-covered polar regions, to bodies of salt and fresh water, as well as our own yard.

Insects are an exciting world all by themselves. They are found inches from our outside door, as well as inside our house. They are not to be feared but to be discovered, respected and understood.

A good example is the dragonfly. It is a ravenous eater of mosquitoes and other insects, as well as an excellent flyer, capable of fantastic speeds. It does just about everything on the wing—catching and consuming prey, mating and even egg laying. To equip it for such functions, it has been provided with eyes that have over 30,000 lenses each and a head that can rotate 180°. Besides that it is decorated with an elaborate array of colorful stripes and spots.

Before emerging as an adult in bright daylight, the Cicada is an insect that lives in the ground for 13 to 17 years. The shrill song of the male is produced by a special organ, in which a part of the cuticle vibrates about 4,500 cycles per second.

Think of it...creatures so intricate with such amazing skills and habits that it is almost impossible for the human mind to comprehend.

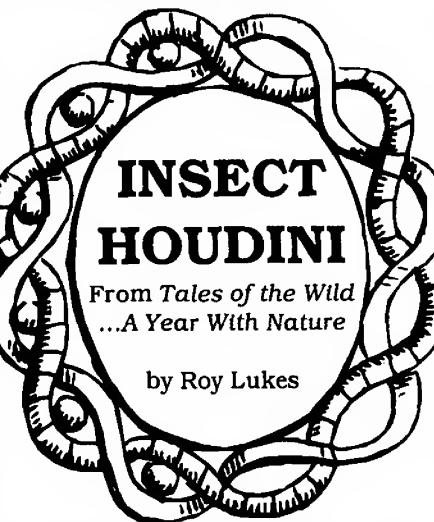
Insects are a valuable part of our lives. Without them we would have none of the orchard fruits we sometimes take for granted. There would be no vegetables, grains, silk, linen, cotton. The list is endless.

There is no reason for us to step on every bug we see just because it is there. If we are not being harmed, the insect should be left alone and undisturbed. It is doubtful that our earth could survive as a living planet if it were not for the insects. ☀

A few weeks ago a Walkingstick provided me with my reward for the day. Often times in past years, having returned with a group of students from a hike in the woods, we would sit down and review what we had seen and learned. Finally I would ask each student to name their favorite sighting of the outing. Naturally I came to look upon those most exciting discoveries as their rewards for the day.

Frequently, the first choices turned out to be some type of animal that we came upon very unexpectedly, one that thoroughly surprised us. Usually those creatures made few sounds, often were slow moving, shy, well-camouflaged, or they lived in out-of-the-way environments infrequently visited by people.

One of the very most exciting finds turned out to be a Snapping Turtle, slow, cumbersome, not about to be hurried. Invariably it had come out of one of the wet, muddy swales and onto the dry, sandy trail in



INSECT HOUDINI

From Tales of the Wild
...A Year With Nature

by Roy Lukes

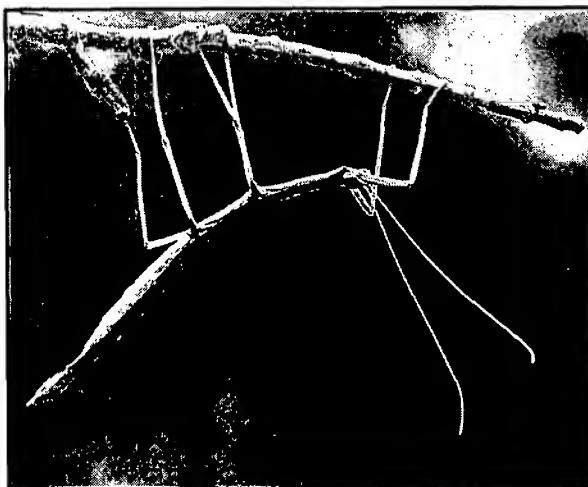
group as did the snake that suddenly found itself in our midst. Fortunately, living in northeastern Wisconsin, we were assured that the reptile was non-poisonous. Unfortunately, this fact did little to put some of the onlookers at ease.

We consider ourselves fortunate to be living in a woods that contains many Northern Red Oaks, simply because of all the creatures that feed upon the acorns. The oaks also account for plenty of Walkingsticks because of their reputation for favoring the flesh of oak leaves. Fortunately, the population of these intriguing insects is never so high in our area that it jeopardizes in any way the large hardwood trees.

The Walkingstick surprised me recently in the raspberry patch. I reached down to pick a berry—and there was the 4-inch-long passive mimic, a cane without leaves. Its incredible

stick-like camouflage is used only for protection from predators and not for ambushing other insects. This creature is strictly a vegetarian. As I gently tapped the raspberry cane the Walkingstick and the plant suddenly became one and the same thing.

Once confronted, the Walkingstick stretched its front legs straight ahead causing it to more closely resemble the plant on which



Northern Walkingstick (*Diapheromera femorata*)
August 10, 1995, Door Co. WI
Photo: Roy Lukes

search of a site to lay its eggs.

Porcupines and Opossums always turned up when we least expected to see them, resulting in some momentary excitement as the animals hastily made their retreat. Usually the Porcupine would climb into a nearby tree offering the group a good look—from a distance.

No animal ever brought about such a wide range of emotions in the

it was resting. Young Walkingsticks are green, while the adults tend to be more brownish. Their long thorax and abdomen, long threadlike antennae and long slender legs of about the same length combine to make this insect easy to identify.

Their slow deliberate movements are similar to the natural wind-caused movements of the plants, making the insect and plant blend all the more. Walkingsticks become very stationary when danger approaches. In fact, they are known to do most of their moving and feeding under cover of darkness. During daylight hours they tend to rest motionlessly.

This is one of the few insects that can regenerate lost legs. It is easy to imagine that a creature with such long spindly appendages occasionally loses one to a predator, such as a Praying Mantis. None of the higher animals on earth are known to be capable of growing new legs.

The leaves of oak, hazelnut, locust, cherry, and walnut trees number among the plant materials they consume. It is rare that damaging outbreaks of these fascinating insects occur in this part of the country. As a matter of fact, Walkingsticks tend to be quite uncommon this far north.

The specimen I enjoyed in early September, appeared to be a fully-grown adult. I suspect that mating is occurring this month. About 100 eggs are dropped randomly to the ground as the female walks among the branches and foliage of trees. A quick-drying, water-proof, varnish-type fluid coats each egg when laid, thereby providing it with a highly protective case. Each oval egg is about three mm long and is polished-black with a whitish stripe on the side. The eggs have to be extremely durable because this is the only way Walkingsticks at this latitude survive through the winter. Hibernation is in the egg stage.

Like Grasshoppers and Field Crickets, Walkingsticks go through an incomplete metamorphosis. Nymphs hatch from the eggs and appear like miniature adults. They eat, grow and shed their skin a few times before reaching adult size.

Please see Walkingstick, Page 8

The four known species of moths belonging to the *Drepanidae* Family (Hooktip) are listed in the *Peterson Field Guide to Eastern Moths* by Charles V. Covell, Jr. They are very easy to identify because of the hook at the tip of their forewings. They are, however, quite variable in their markings.



Arched Hooktip Moth (*Drepana arcuata*)
female on birch leaf—8/5/97, Sheboygan Co.
Photos: Janice Stiefel

Description: Wingspan: 1 to 1½ in. There is an unusually sharp-hooked tip on the forewing. The wings are pale yellowish white to orange-yellow. The lines are variably distinct. The brown line toward the outer edge of the forewing widens as it curves toward the forewing tip (apex). In Hooktip moths, the proboscis is either absent or reduced; the male antennae are feathered.

Habitat: Forested areas.

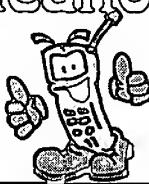
Larvae: The caterpillars lack rear legs. Their horizontal bottom half is green, while the top horizontal half is crossed with bands of greenish-yellow and brown spots. There are two pair of small black knobs toward the cream and brown, striped head. The hind quarters come to a sharp point. Pupae are formed amid fallen leaves, usually of the food plant.

Flight: Night-flier, April to Oct.

Host Plants: Birch (*Betula spp.*) and Alder (*Alnus spp.*).

A Communication Miracle!

by Janice Stiefel



Comments: If you look carefully along your outside walls in the morning, near an all-night light fixture, you are likely to find one of these moths visiting your yard sometime during the summer or fall months.

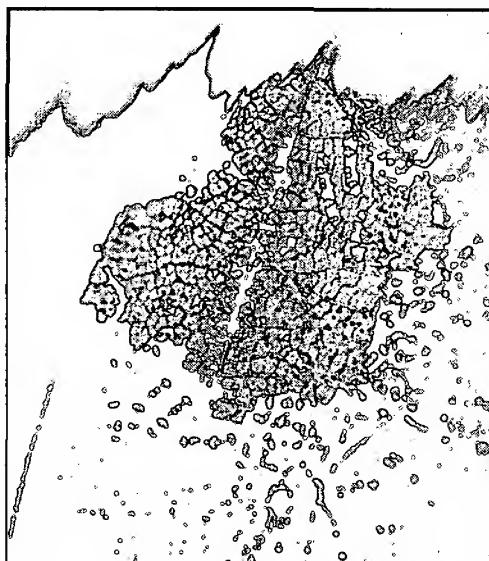
Name Origin: Origin of the Genus Name, *Drepana* (dri-PAN-a), is from the Greek words, *drepante* and *drapanon*, meaning "a sickle." Species Name, *arcuata* (ark-you-AY-ta), is from the Latin word, *arcuatio*, meaning "a curvature, an arch." The family name is pronounced, dri-PAN-dee.

Observations: I captured a female Arched Hooktip Moth under our outside lights at night. Within a few hours, it laid eggs in strips inside the jar in which it had been placed. Eight days later, the eggs hatched. I did not put their food plant (I chose birch) in that same jar because the tiny caterpillars might not be able to find the leaves. With close observation and attention, I was present when they began to hatch. Using a magnifying glass and carefully lifting the very tiny, almost transparent, caterpillars (one by one) out of the jar with a toothpick. I placed them in a new jar containing a birch branch with five leaves. The caterpillars were placed on different leaves in various locations on each leaf—wherever I could get them to release their sticky hind quarters from the toothpick. After rescuing 26, I covered the jar with a nylon stocking remnant and a rubber band. The next day, when I peered into the jar to see how they were

doing, I couldn't see any of them. Being so small, I figured they must have died and dried up. However, after lifting out the five-leaf birch branch, I discovered something quite remarkable! Those 26 tiny caterpillars had all found each other and had gathered in a circular formation, somewhat like a little commune. They had covered themselves with fine, transparent silk threads. Remember, they had been placed on different leaves in various locations on the leaves. For all those very tiny little creatures to gather in one spot was truly a wonder of nature. It makes us realize that even minuscule, seemingly insignificant creatures can have a secret means of communicating. In my (human) opinion, it appeared that one of them had to be a leader.

The caterpillars grew substantially during the first few days and stayed together as a "family" for about two weeks, then each one ventured off to explore on its own for another week. After approximately three weeks, they formed pupae by forming an envelope out of the birch leaves and enclosing themselves inside. Ten days later, the adults started emerging from their pupae. They were released to find mates and start the cycle all over again. ♀

© 2000 Janice Stiefel



Arched Hooktip larvae
8/14/97—two days old

Secrets of the Southeastern Wisconsin Red-Haired Bumblebee

by Babette Kis

When Purple Prairie Clover starts to bloom on a southeastern Wisconsin remnant tall grass prairie, Red-haired Bumblebees (*Bombus ternarius*) appear and collect its pollen and nectar. When the prairie clover blooms fade, the bees seem to disappear. Where are these bees during the rest of the year? And in spring, when the queens emerge from hibernation to seek pollen and nectar, what flowers do they frequent? Although I had observed what I called "Orange-haired Bumblebees" since I was a child, it wasn't until spring of 1997 that I began to seek the answers to these questions.

On every weekend, beginning in May, I looked for Red-haired Bumblebee queens on a ten-acre prairie remnant where I had seen these bees in past years. I never found a queen, but in July the workers were out on Purple Prairie Clover flowers. After the prairie clover faded, I looked for these bees on other prairie plants: wild rose, *lespediza*, *stachys*, goldenrod and aster. I didn't find any.

In spring of 1998, I continued my search for *Bombus ternarius* on both the prairie remnant and the nearby 20-acre degraded oak opening. The oak opening contains numerous clumps of Gray Dogwood, several clones of Smooth Sumac, American Hazelnut and scattered Buckthorn. At the low east edge, scattered Asian Honeysuckle and clumps of Pussy Willow border a cattail marsh and pond. The pond, oak opening and prairie remnant are surrounded by plowed fields.

On May 4, 1998, I found a Red-haired queen visiting Virginia Bluebells that were growing under the oaks. During the next week, I observed two Red-haired queens on Virginia Bluebells. Although numerous Wood Violets, Bloodroot, Sharp-lobed Hepatica, White Trout Lilies, Recurved Trillium, and Wild Geranium were blooming here, I

found the Red-haired Bumblebees only on the bluebells. I did not find these bees on the Hoary Puccoon, Shooting Star, Seneca Snakeroot, and Yellow Star Grass flowers that grew on the adjacent prairie.

By May 22, the Virginia Bluebells had faded and the Virginia Waterleaf flowers were opening. One Red-haired queen bee was working on this plant's pale lavender flowers. This was the last day in spring of 1998 that I saw a Red-haired Bumblebee.

I now knew that the queen emerged in early spring when the Virginia Bluebells bloomed, but where did she make her nest? On May 1, 1999, the Virginia Bluebells in the oak opening began to bloom. On May 2, I first saw a Red-haired Bumblebee queen on these flowers. During the next few days, I followed her as she flew back and forth from the bluebells to a rock-strewn hedgerow in the oak opening. She also flew to a wet area surrounded by several species of pussy willows, but I was not able to find her when she flew to this area. On May 18, a Red-haired queen emerged from the

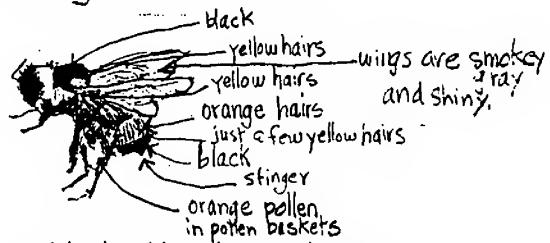
nest I had staked on May 2 and flew to and from the Virginia Bluebells and one Virginia Waterleaf, which had just started to bloom. On May 19, about 9:00 in the morning, a Red-haired queen flew to both Virginia Waterleaf and Virginia Bluebell flowers. At mid-afternoon, she returned to the hedgerow and climbed under some brown Bur Oak leaves that covered the opening to her nest. I watched and waited for several hours, but she did not emerge.

I visited the oak opening and prairie every week during the rest of May and into June but did not see any of these bees. On June 20, 1999, Purple Prairie Clover began blooming on the prairie. I searched the entire remnant, but didn't find a single Red-haired bee on Purple Prairie Clover, Gray Dogwood, Potentilla, Spiderwort, Thimbleweed or Black-eyed Susan flowers. The next week, on June 26, the Red-haired worker bees were out. I counted six of them collecting bright orange pollen from a clump of Purple Prairie Clover. I did not see them on any other prairie flowers.

By July 11, the Prairie Clover had almost finished blooming. Compass Plant, Prairie Coreopsis, Wild Rose, Gray-Headed Coneflower, field Thistle and Leadplant were in full bloom. On that day, I found only one

Please see, **Bumblebees, Page 8**

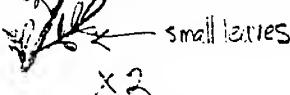
Orange Hair Bumble Bee



This is abt. 2 1/2 times larger than the Orange Hair Bumble Bee

The pollen in its baskets is exactly the same color as the orange hairs. They are only out on Purple prairie clover. This is from my collection.

On the prairie clover.

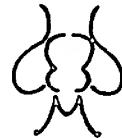


Copy of a page from Babette's high school journal, probably about 1966.

Address Correction Requested

Wisconsin Entomological Society

Bally's Harbor, WI 54202
2125 Grove Rd.
Janice Stiegel, Editor



Wisconsin Entomological Society Newsletter — June 2000

Page 8

Walkingstick, from Page 5

From birth to maturity requires about six weeks.

One of the longest insects in the world is an East Indian Walkingstick whose body is around thirteen inches long. With its legs outstretched, it measures twenty inches! I'm aware of only one species of Walkingstick in our region, fortunately considerably shorter than the one from the East Indies! One might call the Walkingstick the "Houdini of the Insect World," now you see it, now you don't. September would be incomplete without my being able to admire one of these fascinating insects, a recent reward in the raspberry patch. ☺

Roy has been writing nature columns and books for over 30 years. This essay on the Walkingstick is taken from Roy's fifth book, "Tales of the Wild," released in November 1999. Roy can be reached at (920) 823-2478 or by mail at 3962 Hillside Rd., Egg Harbor, WI 54209
E-mail: lukes@dcwis.com

Bumblebees, from Page 7

Red-haired bee busily collecting orange Leadplant pollen.

Red-haired Bumblebees in the Milwaukee Public Museum insect collection are recorded as being found on goldenrod in the north-central Wisconsin counties of Adams and Langlade. During my trips to the southeastern Wisconsin prairie remnant from July 14 through the first week in September, I found a lot of bees on early, tall, Canada, Stiff and other goldenrod species, but none of them were Red-haired Bumblebees. Red-haired Bumblebees were apparently once common to southeastern Wisconsin, as reported by Medler and Carney in "Bumblebees of Wisconsin" (January 1963, University of Wisconsin, Madison Research Bulletin 240). In 1962 I wrote of seeing "Orange-haired Bumblebees on wild purple clover" on a Racine county prairie remnant near my childhood home. In a 1970 college

survey of southeastern Wisconsin prairie remnants, I found almost three times more prairie remnants and oak savannas in Racine and Walworth County than I did when I re-surveyed this area in 1996. I recorded Red-haired Bumblebees on three sites in 1970, but at only one area in 1996. Is this *Bombus ternarius* associated with the southeastern Wisconsin prairie-savanna, which, before settlement, covered most of these counties?

Thanks to Milwaukee Public Museum staff for identifying a Red-haired Bumblebee worker I collected in 1994 as *Bombus ternarius*. ☺

© 1999 Babette Kis

Babette is a wife, mother of three, full time project architect at the City of Milwaukee, part time naturalist, writer and artist, and a former science teacher. She has kept notes and sketches of her field observations from the time she was eight years old. She is presently working on a book which will feature her priceless field notes and detailed sketches.